



UNITED STATES PATENT AND TRADEMARK OFFICE

W

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,651	02/19/2002	Loren L. Rademacher	1094.193US1	5284
21186	7590	08/24/2004	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			LEE, KYUNG S	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/078,651

Applicant(s)

RADEMACHER ET AL.

Examiner

Kyung S. Lee

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 11-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1-10 and 17-20 are considered. Claims 11-16 are withdrawn from consideration.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al. (4,849,590) in view of Kalvaitis et al. (4,791,530; Applicant submitted) and in further view of Laskaris et al. (5,225,782).

Becker et al. teaches a transfer switch as claimed except for a flux barrier at least partially near the conductive path.

Kalvaitis et al. teaches a flux barrier 40, 42 (fig. 1) between the switch stacks for providing physical separation and isolation between phases (col. 1, lines 20-23). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide switch device of Becker et al. with the flux barriers as taught by Kalvaitis et al., since the barriers of Kalvaitis et al. would provide the switch of Becker et al. with physical separation and isolation between phases between the stacks.

Becker et al. and Kalvaitis et al. teach the claimed invention except for the flux barrier being a planar sheet made of steel (claims 3 and 20). Laskaris et al. teaches a flux barrier 4 and 22 being composed of steel (col. 3, line 8 and col. 4, line 39) for the purpose of providing a magnetic shield.

Art Unit: 2832

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the switch device of Becker et al. and Kalvaitis et al. with the steel flux barrier as taught by Laskaris et al., since the steel barrier of Laskaris et al. would provide the switch device of Becker et al. and Kalvaitis et al. with a magnetic shield.

Regarding claim 2, the barrier of Kalvaitis et al. is a planar sheet (see fig. 3).

Regarding claims 4, 5 and 7, Kalvaitis et al. discloses a plurality of conductive paths of cassettes (col. 4, line 1 and see fig. 1).

Regarding claim 6, the barrier 40 is secured to at least one of the cassettes (see fig. 7 of Kalvaitis et al. for securing the barrier).

Regarding claims 8 and 9, "different portions" of the barrier positioned between the cassettes is shown by fig. 3 of Kalvaitis et al. (barrier 52 compared to barrier 40).

Regarding claim 10, Becker et al. and Kalvaitis et al. disclose the claimed invention except for "the barrier being integral with one other." It would have been obvious to one having ordinary skill in the art at the time the invention was made to integrate the separate pieces of the barrier, since it has been held that forming in one piece an article that has formally been formed in two pieces involves only routine skill in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung S. Lee whose telephone number is (571) 272-1994. The examiner can normally be reached on M-F 5:30AM to 2:00PM.

Art Unit: 2832

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kyung S. Lee
Examiner
Art Unit 2832

A handwritten signature in black ink, appearing to be 'K. Lee', written over the printed name of the examiner.

8/21/04